

### **Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

### **Listing of Claims:**

1. (currently amended) A method for forming an aluminide coating on a target surface of a metal substrate bounding a contained space formed by a feature of the substrate comprising:
  - a) positioning a coating tape over said contained space to at least partially enclose said contained space, wherein the coating tape is in out-of-contact relation with the target surface and comprises:
    - (1) a mixture comprising:
      - (i) at least one aluminum source comprising from about 70% to about 99% by weight of the mixture, the aluminum source containing from about 20 wt.% to about 60 wt.% aluminum; and
      - (ii) at least one halide activator comprising from about 1% to about 15% by weight of the mixture; and
    - (2) at least one binder;
  - b) heating the target surface to a temperature effective to cause the halide activator to react with aluminum ions from the aluminum source to form an Al-halide intermediate within the contained space, which Al-halide intermediate reacts with the aluminum source to react to react with the activator and the target surface, and thereby form forms an aluminide coating on the target surface.
2. (original) The method of claim 1, wherein the aluminum source is a Cr—Al alloy containing from about 20 wt.% to about 60 wt.% Al in the alloy.
3. (original) The method of claim 1, wherein the halide activator is LiF.
4. (original) The method of claim 2, wherein the halide activator is LiF.

5. (currently amended) ~~The method of claim 1, further comprising the step of before positioning the coating tape,~~ A method for forming an aluminide coating on a target surface of a metal substrate bounding a contained space of the substrate comprising:

a) disposing a masking material onto an area of the metal substrate, said area being laterally adjacent to the contained space and not within the contained space[.,,];

b) positioning a coating tape over said contained space to at least partially enclose said contained space, wherein the coating tape is in out-of-contact relation with the target surface and comprises:

(1) a mixture comprising:

(i) at least one aluminum source comprising from about 70% to about 99% by weight of the mixture, the aluminum source

containing from about 20 wt.% to about 60 wt.% aluminum; and

(ii) at least one halide activator comprising from about 1% to about 15% by weight of the mixture; and

(2) at least one binder;

c) heating the target surface to a temperature effective to cause the halide activator to react with the aluminum ions from the aluminum source to form an Al-halide intermediate within the contained space, which Al-halide intermediate reacts with the target surface, and thereby form forms an aluminide coating on the target surface, whereby the masking material inhibits the coating material from forming an aluminide coating on the laterally-adjacent area.

6. (currently amended) A method for forming an aluminide coating on a target surface of a metal substrate, said target surface bounding a contained space formed by said metal substrate, the method comprising:

a) positioning a tape over said contained space to at least partially enclose said contained space but in out-of-contact relation with the target surface, wherein the tape is in out-of-contact relation with the target surface;

b) disposing a slurry coating composition on the tape,  
the slurry coating composition comprising:

(1) a solid pigment mixture, in the amount of from about 30% by weight to about 80% by weight of the slurry coating composition, said solid pigment mixture comprising:

(i) Cr-Al alloy containing from about 20 wt.% Al to about 60 wt.% Al of said alloy; and

(ii) LiF in an amount from about 0.3 wt.% to about 15 wt.% of said Cr-Al alloy;

(2) at least one organic binder; and

(3) a solvent;

the tape being adapted to substantially decompose without residue upon heating to a decomposition temperature which is below a temperature effective to cause the alloy to react with the ~~halide-activator~~ LiF and form an Al-F intermediate which reacts with the target surface; and

c) heating the target surface to a temperature effective to cause the alloy to react with the ~~activator~~ LiF to form an Al-F intermediate which reacts with ~~and~~ the target surface and thereby ~~form~~ forms an aluminide coating on the target surface.

7. (original) The method of claim 6, further comprising the step of before positioning the tape, disposing a masking material onto an area of the metal substrate, said area being laterally adjacent to the contained space and not within the contained space, whereby the masking material inhibits the slurry coating composition from forming an aluminide coating on the laterally-adjacent area.

8. (cancelled)

9. (cancelled)

10. (currently amended) A method for forming an aluminide coating on a target surface of a metal substrate bounding a contained space formed by a feature of the substrate comprising:

a) positioning a coating tape over said contained space to at least partially enclose said contained space, wherein the coating tape is in out-of-contact relation with the target surface and comprises:

(1) a mixture comprising:

(i) at least one aluminum source comprising from about 90% to about 99% by weight of the mixture, the aluminum source containing from about 20 wt.% to about 60 wt.% aluminum; and

(ii) at least one halide activator comprising from about 1% to about 10% by weight of the mixture;

(2) at least one binder;

b) heating the target surface to a temperature effective to cause the ~~aluminum source to react with the activator and~~ halide activator to react with the aluminum ions from the aluminum source to form an Al-halide intermediate within the contained space, which Al-halide intermediate reacts with the target surface, and thereby ~~forming forms~~ an aluminide coating on the target surface ~~at least partially enclosing said contained space.~~

11. (previously presented) The method of claim 10, wherein the aluminum source is a Cr—Al alloy containing from about 20 wt.% to about 60 wt.% Al in the alloy.

12. (previously presented) The method of claim 11, wherein the halide activator is LiF.

13. (previously presented) The method of claim 10, wherein the halide activator is LiF.

14. (currently amended) ~~The method of claim 10, further comprising the step of: before positioning the coating tape,~~ A method for forming an aluminide coating on a target surface of a metal substrate bounding a contained space of the substrate comprising:

a) disposing a masking material onto an area of the metal substrate, said area being laterally adjacent to the contained space and not within the contained space[[],];

b) positioning a coating tape over said contained space to at least partially enclose said contained space, wherein the coating tape is in out-of-contact relation with the target surface and comprises:

(1) a mixture comprising:

(i) at least one aluminum source comprising from about 90% to about 99% by weight of the mixture, the aluminum source containing from about 20 wt.% to about 60 wt.% aluminum; and

(ii) at least one halide activator comprising from about 1% to about 10% by weight of the mixture;

(2) at least one binder;

c) heating the target surface to a temperature effective to cause the halide activator to react with the aluminum ions from the aluminum source to form an Al-halide intermediate within the contained space, which Al-halide intermediate reacts with the target surface, thereby forming an aluminide coating on said target surface at least partially enclosing said contained space, whereby the masking material inhibits the coating material from forming an aluminide coating on the laterally-adjacent area.

15. (new) The method according to claim 1 wherein the contained space is formed by a feature selected from the group consisting of indentations depressions, holes, pockets, hollows, cut-outs, pits and protrusions.

16. (new) The method according to claim 5 wherein the contained space is formed by a feature selected from the group consisting of indentations depressions, holes, pockets, hollows, cut-outs, pits and protrusions.

17. (new) The method according to claim 6 wherein the contained space is formed by a feature selected from the group consisting of indentations depressions, holes, pockets, hollows, cut-outs, pits and protrusions.

18. (new) The method according to claim 10 wherein the contained space is formed by a feature selected from the group consisting of indentations depressions, holes. pockets, hollows, cut-outs, pits and protrusions.

19. (new) The method according to claim 14 wherein the contained space is formed by a feature selected from the group consisting of indentations depressions, holes. pockets, hollows, cut-outs, pits and protrusions.